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 TI **Sonoporation of erythrocytes** by lithotripter
 shockwaves in vitro.
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 AB **Sonoporation of red blood** cells was examined
 in relation to cavitation-induced hemolysis. FITC-dextran at 580,000 MW
 was added to suspensions of canine **erythrocytes** and the mixture
 was exposed to lithotripter shockwaves. Exposure at 5% or 50% hematocrit
 in PBS or 50% in plasma yielded not only hemolysis but also FITC-dextran
 uptake in surviving cells. Hemolysis increased with increasing numbers of
 shockwaves. The numbers of cells with fluorescent dextran uptake remained
 roughly constant for 250-1000 shockwaves, but this represented an
 increasing percentage of the surviving cells. In addition, fluorescent
 microspheres formed spontaneously in samples with hemolysis. An air
 bubble was needed in the chamber to obtain substantial effects,
 implicating the cavitation mechanism. The exposure-response trends could
 be modeled by simple theory for random interaction of the cells with
 bubbles.